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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,814	06/18/2001	Jin-Long Chen	18781-001110	5102
20350	7590 03/26/2004		EXAM	INER
TOWNSEND AND TOWNSEND AND CREW, LLP			CARLSON, KAREN C	
EIGHTH FLO	ARCADERO CENTER LOOR		ART UNIT	PAPER NUMBER
SAN FRANCISCO, CA 94111-3834		4	1653	
			DATE MAILED: 03/26/200-	4

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)			
	09/884,814	CHEN ET AL.			
Office Action Summary	Examiner	Art Unit			
	Karen Cochrane Carlson, Ph.D	D. 1653			
The MAILING DATE of this communicati	on appears on the cover sheet with the	ne correspondence address			
Period for Reply		THO SPOM			
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNICAT - Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communication of the period for reply specified above is less than thirty (30) day of the period for reply is specified above, the maximum statutory Failure to reply within the set or extended period for reply will, Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	FION. CFR 1.136(a). In no event, however, may a reply button. ys, a reply within the statutory minimum of thirty (30), y period will apply and will expire SIX (6) MONTHS by statute, cause the application to become ABAND	oe timely filed) days will be considered timely. from the mailing date of this communication. ONED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed or	n <u>12/29/03</u> .				
·					
3) Since this application is in condition for a	allowance except for formal matters,	prosecution as to the merits is			
closed in accordance with the practice u	inder <i>Ex parte Quayle</i> , 1935 C.D. 11	, 453 O.G. 213.			
Disposition of Claims					
4)⊠ Claim(s) <u>10-15 and 24-27</u> is/are pending	g in the application.				
4a) Of the above claim(s) is/are w					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>10-15 and 24-27</u> is/are rejected	d. ·				
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction	and/or election requirement.				
Application Papers					
9)☐ The specification is objected to by the Ex	kaminer.				
,	☐ accepted or b)☐ objected to by t				
Applicant may not request that any objection					
Replacement drawing sheet(s) including the					
11) The oath or declaration is objected to by	the Examiner. Note the attached Of	lice Action of form PTO-152.			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for	foreign priority under 35 U.S.C. § 11	9(a)-(d) or (f).			
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority doc					
	uments have been received in Appli				
•	ne priority documents have been rec	eived in this National Stage			
application from the International	•	oived			
* See the attached detailed Office action fo	or a list of the certified copies not rec	eivea.			
Attachment(s)					
1) Notice of References Cited (PTO-892)	· —	mary (PTO-413)			
2) Notice of Draftsperson's Patent Drawing Review (PTO-3) Information Disclosure Statement(s) (PTO-1449 or PTO	- C]	ail Date nal Patent Application (PTO-152)			
Paper No(s)/Mail Date <u>1/2003</u> .	6) Other:				

Application/Control Number: 09/884,814

Art Unit: 1653

Applicant's election without traverse of Invention II, Claims 10-15 and 24-27 in the paper filed December 29, 2003. Claims 1-9 and 16-23 have been canceled.

Priority is to July 29, 1998.

The disclosure is objected to because of the following informalities: Cross reference to the parent application must be placed on page 1 of the specification.

Appropriate correction is required.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 10-15 and 24-27 are are rejected under 35 U.S.C. 103(a) as being unpatentable over Boss et al. (May 12, 1997; FEBS Lett. 408(1): 39-42) in view of Bathgate et al. (1992; Molecular Microbiology 6(3): 363-370). Boss et al. teach uncoupling protein-3 having the amino acid sequence that is identical to SEQ ID NO: 1 (dependent Claim 26). This protein is encoded by a nucleic acid sequence comprising SEQ ID NO: 2 (dependent Claim 27). The codon at 55Ala is GCC (dependent Claim 24). The codon for 219Thr is ACT (dependent Claim 25).

Boss et al. do not teach operatively linking the nucleic acid sequence encoding uncoupling protein-3 to a promoter, contained in an expression vector, or an expression vector having regulatory elements that control the expression of the nucleic acid encoding uncoupling protein-3, placing a the nucleic acid encoding uncoupling protein-3 into a cell, or the cell

Application/Control Number: 09/884,814

Art Unit: 1653

having regulatory elements that control the expression of the nucleic acid encoding uncoupling protein-3, or using recombinant techniques for the production of uncoupling protein-3.

Bathgate et al. teach cDNA encoding uncoupling protein. This cDNA was inserted into vector pKV49 with the inducible GAL1-10 upstream activation site to produce pKV49-UCP. S. cerevisiae was transformed with pKV49-UCP and the expressed uncoupling protein isolated via western blot.

It would have been obvious for a person of ordinary skill in the art to insert the nucleic acid sequence encoding uncoupling protein-3 taught by Boss et al. into the vector pKV49 (Claims 10, 11, 12), transform host cells such as S. cerevisiae (Claims 13, 14), and recombinantly produce uncoupling protein-3 (Claim 15) because Bathgate et al. teach the successful expression of the analogous protein uncoupling protein when cDNA encoding uncoupling protein is placed into pKV49 and expressed from S. cerevisiae.

Prior art of record:

USP 5,741,666, Tartaglia, teach human C5 protein homolog encoded by the nucleic acid sequence depicted in SEQ ID NO:38. See the alignment attached to the patent. This nucleic acid molecule does not encode the first 10 amino acids of instant UCP2, and the codon corresponding to UCP2 amino acid position 55 encodes Val. The instant nucleic acid moleucle is not taught in \square 666, but would be expected to hybridize to SEQ ID NO:38 - see the claims.

No Claims are allowed.

Application/Control Number: 09/884,814

Art Unit: 1653

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen Cochrane Carlson, Ph.D. whose telephone number is 571-272-0946.

The examiner can normally be reached on 7:00 AM - 4:00 PM, off alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Christopher Low can be reached on 571-272-0951. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KAREN COCHRANE CARLSON, PH.

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